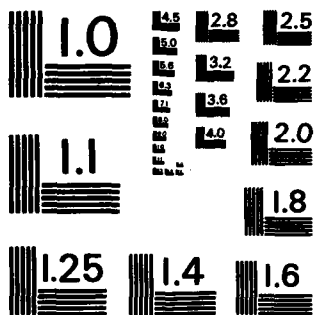


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CHARACTERISTICS OF CONTRIBUTORS
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THE AUTOMATED AID FOR
PERSONNEL RETENTION

Lee Roy Beach, Barbara L. Weinstein,
and Barbara H. Beach

University of Washington

Technical Report 84-1
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Characteristics of Contributors to the Information Base
for the Automated Aid for Personnel Retention

Lee Roy Beach, Barbara L. Weinstein and Barbara H. Beach
University of Washington

This report presents data on the characteristics of 99 Naval enlisted personnel who have contributed to the information upon which the ONR sponsored construction of an Automated Aid for Personnel Retention is based. The information was obtained in face-to-face conversations that, while largely unstructured, included various predetermined areas of content. The conversations were conducted over an extended period and each lasted between fifteen minutes and one hour. Participants were obtained through the cooperation of the Base Commanders of various Naval installations in and around the Puget Sound area of Washington State with the help of the career counselors, for which cooperation and help we are very grateful.

In general, participants were solicited by announcements to the effect that a researcher from the University of Washington was available, and willing, to discuss the issues involved in the decision about whether or not to reenlist. Those persons who were in the process of making such a decision were invited to discuss their decision with the researcher; some declined but most were eager to participate when convenient times could be arranged.

At the beginning of the conversation it was made clear that the researcher was working on a project that was funded by the Office of Naval Research, but that she was employed by the University of Washington and that whatever was said to her would remain confidential and all information obtained would be restricted to use by project

personnel. Insofar as possible, the conversations were kept informal and an effort was made to limit topics to those relevant to the reenlistment decision. The researcher engaged in the conversations was a middle-aged woman who holds a Masters degree in Social Work and who has had a great deal of interviewing experience.

In the course of the conversation, the researcher made notes on a xerox of a handwritten form (handwritten to underscore the informal nature of the conversation); the use of the form insured that all areas of interest were touched upon. After completion of the conversation the notes were coded for data analysis. The data that are to be presented here are based upon these coded notes.

Of major concern in the conversations were the reasons, pro and con, influencing the participants' thinking about whether or not to reenlist. The goal was to obtain a pool of commonly considered, highly relevant reasons to use in the computer based decision aiding system that is to be the product of the contracted research. In order to insure that the pool is sufficiently representative of the various reasons operative for the variety of people involved in making reenlistment decisions, it was necessary to carefully select participants who in fact represented that variety of people. To this end, participants were selected from among (1) Surface Personnel, (2) Air Personnel, and (3) Submarine Personnel; within each of these categories a cross section of jobs is represented. Thus, without having to invest in an extremely large number of conversations with an extremely large number of participants, it was possible to obtain a representative cross section of decision makers and jobs. Moreover, it soon became apparent that, with minor variations, the reasons that were obtained were not substantially different from one category to another, or from one job to another. Therefore, it is reasonable to

assume that the information obtained has a suitable degree of generality and is a solid base upon which to build the decision aid.

Results

The purpose of this report is to examine the characteristics of the people who participated in the conversations - the specific reasons relevant to the pros and cons of reenlistment that were obtained in the conversations will be described in a subsequent technical report.

Below are the frequency distributions or descriptive statistics for those variables that were obtained for all the participants during the course of the conversations. All frequency distributions (percentages) and descriptive statistics are based on a sample size of 99 participants.

Sample Sources and Categories of Occupations. The following table indicates from which installation participants were obtained and to which of the three broad job categories they belonged. Note that the submarine base provided both submariners and surface personnel (e.g., crews of sub tenders).

<u>Installation</u>	<u>Job Category</u>		
	<u>Surface</u>	<u>Air</u>	<u>Submarine</u>
<u>Shipyard</u>	24%	1%	0%
<u>Air Station</u>	0%	29%	0%
<u>Submarine Base</u>	29%	0%	16%

Specific Job Type. The specific types of jobs (rates) held by the sample participants were:

AT	(Aviation Electronics Specialist)	16%
MS	(Mess Management-Cook)	11%
AE	(Aviation Electrician)	8%
ET	(Electronic Technician)	8%
Yeoman	(Secretary-Clerk)	7%
AG	(Fire Control Technician)	5%
MM	(Machinist's Mate-Nuclear Engine Mech)	4%
SH	(Ship's Storekeeper)	4%
FTB	(Fire Control Technical Ballistics)	3%
HT	(Hall Maintenance Technician)	3%
JOC	(Journalist)	3%
MA	(Master at Arms-Military Police)	3%
EN	(Engine Mechanic-Diesel)	2%
IC	(Instructor)	2%
ICC	(Interior Communications Technician)	2%
MR	(Machinery Repairman)	2%
QM	(Ship's Movement Coord-Radio Tug Dispatch)	2%
BM	(Bos'n's Mate)	1%
BT	(Boiler Technician)	1%
	(Caring for Military Working Dogs)	1%
	(Construction Electrician-SeaBees)	1%
EMC	(Electrician's Mate)	1%
GMCS	(Gunner's Mate)	1%
GMT	(Gunner's Mate)	1%
HRMS	(Human Resource Management Technician)	1%
LN	(Legal Technician-Paralegal)	1%
OS	(Operation's Specialist)	1%

PHCS (Photographer's Mate)	1%
RM (Radioman)	1%
RP (Religious Program Specialist-Chap Ass't)	1%
STG (Sonar Technician)	1%

Gender. The sample consisted of 90% males and 10% females.

Race/Ethnicity. The racial/ethnic characteristics of the sample participants were:

Caucasian	85%
Black	12%
Hispanic	2%
Asian/Filipino	1%

Age. The mean age of the sample participants was 28 years, with a standard deviation of 5.8 years and a range of 20 to 42 years.

Marital Status. The marital status of the sample participants was:

Married	50%
Single	35%
Divorced	11%
Separated	4%

Number of Children. The number of children the sample of participants reported as having was:

None	54%
One	15%
Two	23%
Three	5%
Four	1%
Five	2%

Years in Military. The mean number of years the sample participants spent in the military was 7.80 years, with a standard deviation of 5.20 years and a range of 1 to 23 years.

Pay Grade. The distribution of the pay grades for the sample participants was:

E1	0%
E2	0%
E3	4%
E4	30%
E5	28%
E6	20%
E7	10%
E8	3%
E9	1%
Missing Info	3%

Education. The highest level of education completed by the sample participants was:

9th Grade	2%
10th Grade	3%
11th Grade	5%
12th Grade	52%
G.E.D.	6%
Some College	29%
College Graduate	3%

Father's Occupation. The occupation of the fathers of the sample participants was:

Skilled Laborer	67%
Professional	21%
Unskilled Laborer	11%
Missing Info	1%

Mother's Occupation. The occupation of the mothers of the sample participants was:

Skilled Laborer	39%
Housewife	36%
Professional	18%
Unskilled Laborer	4%
Missing Info	2%

Navy Training. The following distribution shows the types of training and education received by the sample participants after enlisting (Note: many participants received more than one type of education/training):

One A School	58%
Two or More A Schools	20%
One C School	27%
Two or More C Schools	1%
Additional Courses	59%
On Job Training	10%
G.E.D.	4%
College	2%

Reasons for Joining the Navy. The most frequently given reasons for joining the navy were (1) Education and Training, (2) Travel and Adventure, (3) Job Security, and (4) Financial.

Reenlistment Intentions. When asked about whether or not they intended to reenlist, the sample participants responded:

Not Reenlist	35%
Undecided	23%
Reenlist	41%

Number of Pro and Con Reasons Reported in Considering Reenlistment Decision. The mean number of pro reenlistment reasons reported by the sample participants was 10.97, with a standard deviation of 5.72 and a range of 1 to 40. The mean number of con reenlistment reasons reported by the sample participants was 9.93, with a standard deviation of 5.94 and a range of 0 to 30.

Relationship Between Number of Pro and Con Reasons Reported and Intentions About Reenlistment. If the reported reasons are to be appropriately used in building a decision aid, they should bear a reasonable and orderly relationship to participants' reenlistment decisions. Previous research would suggest that participants who report the most con reasons should be least likely to intend to reenlist, participants who report the most pro reasons should be most likely to intend to reenlist, and participants who are undecided about reenlistment should report intermediate numbers of pro and con reasons. Figure 1 shows the relationship between intention and numbers of reported pro and con reasons; the expectation is upheld (Oneway ANOVA for pro reasons, Not Reenlist \bar{X} = 8.31, Undecided \bar{X} = 11.91, Reenlist \bar{X} = 12.71, $F(2,96)$ = 6.67, p = .002; Oneway ANOVA for con reasons, Not Reenlist \bar{X} = 12.37, Undecided \bar{X} = 9.61, Reenlist \bar{X} = 8.02, $F(2,96)$ = 5.58, p = .005). Of course, sheer number of reasons

is but a rough measure of the impact of the reasons upon the reenlistment decision. Subsequent research will examine the relative contributions of the various reasons and what these weightings imply for counseling for reenlistment decisions.

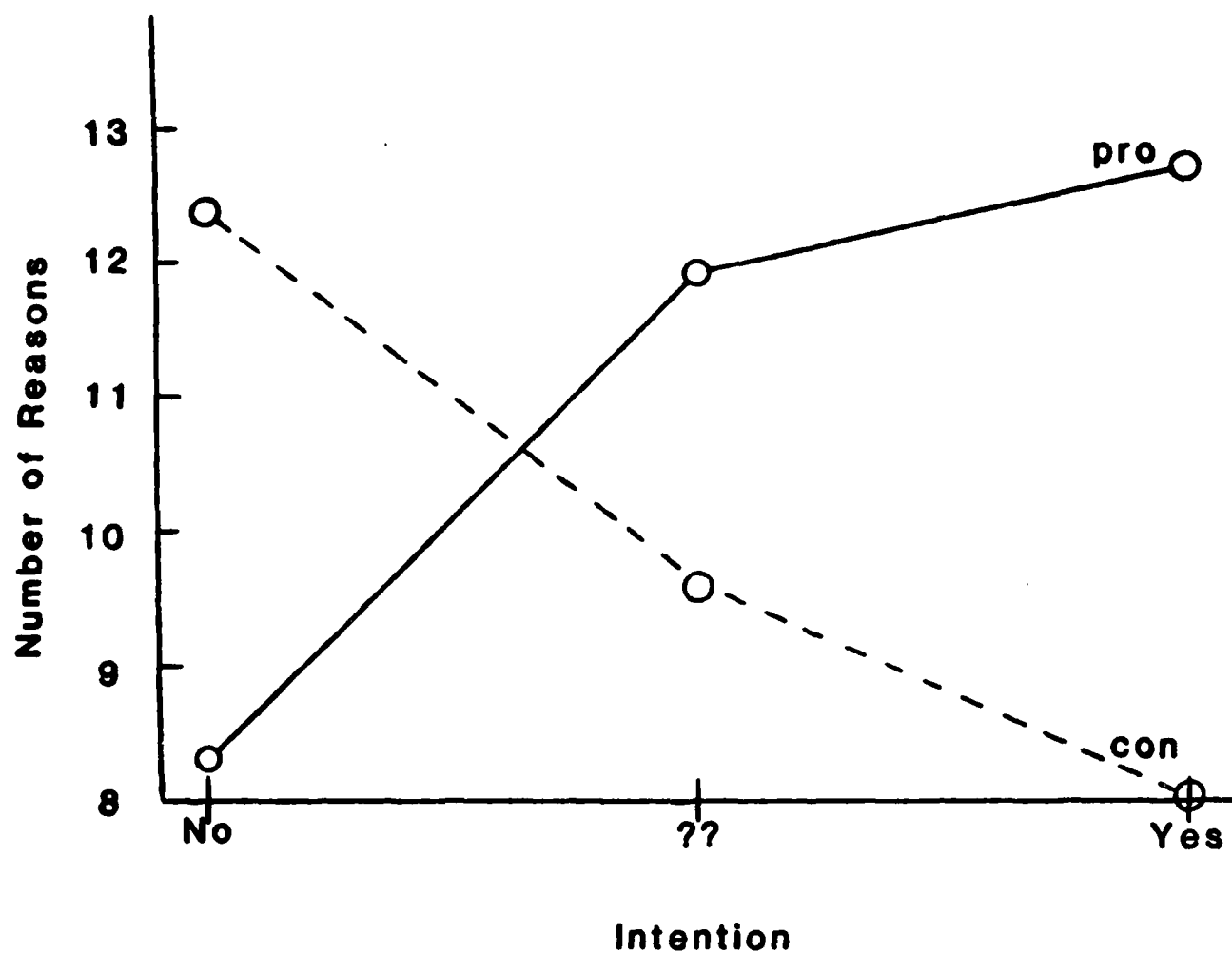


Fig. 1. Relationship between intention about reenlistment and number of reported pro and con reasons contributing to the intention.

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